



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|------------------------|---------------------|------------------|
| 10/038,274 | 01/04/2002 | Jeffrey Allen Sturgill | UVD 0280 PA | 6551 |
| 7590 | 09/27/2006 | | EXAMINER | |
| Killworth, Gottman, Hagan & Schaeff, L.L.P. One Dayton Centre, Suite 500 Dayton, OH 45402-2023 | | | | SHEEHAN, JOHN P |
| | | ART UNIT | | PAPER NUMBER |
| | | 1742 | | |

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

| | | | |
|-----------------|-----------------|--------------|-----------------|
| Application No. | 10/038,274 | Applicant(s) | STURGILL ET AL. |
| Examiner | John P. Sheehan | Art Unit | 1742 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 17 July 2006.
2a) This action is FINAL. 2b) This action is non-final.
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1,3-8,10-48,123,124,126-128,130-132,135-148 and 151-154 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) 152-154 is/are allowed.
6) Claim(s) 1,3-8,12,14,15,123,124,126-128,130-132,135-148 and 151 is/are rejected.
7) Claim(s) 10, 11, 13 and 16-48 is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/06, 7/06, 8/06.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) Notice of Informal Patent Application
6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112, 1st Paragraph

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 123, 124, 126 to 128, 130-132, 135-147 and 151 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

- I. The newly added claim limitation, "the organic valence stabilizer is not a carboxylate", does not find support in the application as filed. Applicants have cited page 5, line 23 to page 7, line 6 of the specification as support for this new claim language. The Examiner does not agree. The cited section of the specification is directed to a discussion of the prior art and does not discuss the instantly claimed invention. Further, the cited section of the specification does not state in any manner that, "the organic valence stabilizer is not a carboxylate".

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3 to 8, 12, 14, 15 and 148 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schreiver (US Patent No. 5,411,606, cited in the IDS submitted April 3, 2002).

Schreiver teaches a corrosion inhibiting conversion coating bath consisting essentially of a solvent, and a cobalt-III hexacarboxylate complex. The cobalt-III hexacarboxylate complex solution is formed by dissolving and reacting a metal carboxylate salt and a soluble cobalt-II salt to form the cobalt-III hexacarboxylate complex containing solution (column 2, line 67 to column 3, line 12). The metal carboxylate salt is used by Schreiver to prevent valence shift (column 6, line 60 to column 7, line 10) and therefore is considered to be encompassed by the valence stabilizer recited in applicants' claims. The resulting cobalt-III hexacarboxylate complex is considered to be encompassed by the claim language, "cobalt/valence stabilizer complex" recited in the instant claims. Schreiver teaches that the solvent for the coating bath is water (column 8, line 65 to 68). Applicants also discuss Schreiver at page 5, line 27 to page 6, line 6 of their specification;

The following references describe conversion coating processes based on cobalt: PCT International Application Nos. WO 96/29,448, WO 98/51,841, WO 96/21,753, WO 93/05,198, and S. African Patent No. ZA 93/01,234 to Dolan; PCT

International Application Nos. WO 96/05.335, WO 94/00,619, and European Patent Application Nos. EP 523,288, EP 458,020, EP 488,430, and U.S. Patent Nos. 5,873,953, 5,411,606, 5,378,293, 5,298,092, and 5,551,994 to Schriever. These specifications use additives that they term "bath stabilizers." These chemical species are claimed to form more stable coordination bonds with cobalt(III) cations than with cobalt(II) cations in the aqueous conversion coating solution. Specifically, carboxylates, hydroxyalkyl amines (aminoalcohols, such as triethanolamine), or nitrito complexes are described in these specifications as being added to the bath to retain trivalent cobalt in solution and to stabilize concentrations during the coating process. These bath stabilizers only treat and extend the service life of the cobalt(III) in the conversion coating solution itself (emphasis added by the Examiner).

Applicants' admissions include the limitations of claims 1, 3 to 8, 12, 14, 15 and 148.

Applicants' admissions of the known prior art render the instant claims obvious, MPEP 2129.

With respect to the properties recited in claims 3 to 7 and 12 , including solubility, the electrostatic barrier, the ion exchange property, the thickness of the coating (i.e. the coating resulting from the contact with the substrate), the cavity containing cobalt and an additional ion are all inherent properties necessarily present from the presence of the same claimed chemicals, namely the trivalent cobalt complex that has been combined with a ligand (i.e. a valence stabilizer), *In re Best*, 195 USPQ, 430 and MPEP 2112.01.

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, *In re Best*, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' *In re Spada*, 15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can

be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

Allowable Subject Matter

3. Claims 152-154 are allowed.
4. Claims 10, 11, 13 and 16 to 48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed July 17, 2006 have been fully considered but they are not persuasive.
6. Applicants' argument that Schreiver is directed to stabilizing the aqueous bath and does not teach the functionality of trivalent or tetravalent Co in the actual conversion coating is not persuasive. Contrary to applicants' arguments Schreiver does teach that the conversion coating contains trivalent and/or tetravalent Co (column 14, lines 1 to 13).
7. Applicants argue that the "bath stabilizers" used in accordance with Schreiber reduce the formation and precipitation of trivalent cobalt-containing solids during coating deposition" (applicants" response, page 36, first paragraph). The Examiner is not persuaded. Applicants' have not provided any evidence to support their argument. Further, even if applicants were to provide such evidence, applicants' own arguments

state that the "bath stabilizers" used in accordance with Schreiber "reduce the formation and precipitation of trivalent cobalt-containing solids during coating deposition", however applicants' do not state that the trivalent cobalt-containing solids are eliminated. Thus, Schreiber's coating would be expected to contain some quantity of trivalent cobalt-containing solids as recited in the instant claims.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

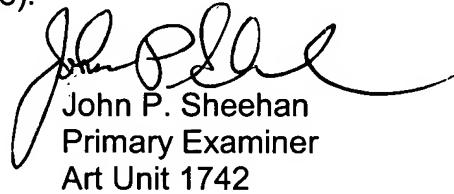
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (571)

272-1249. The examiner can normally be reached on T-F (6:45-4:30) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John P. Sheehan
Primary Examiner
Art Unit 1742

jps